# Summary of well testing near coal ash ponds

The N.C. Department of Environment and Natural Resources, or DENR, updated on May 19 individual results from testing conducted at public and private water supply wells near Duke Energy's 14 coal-fired electrical generating facility boundaries. This is the first update to well test results since the initial results were posted to the DENR website April 30.

### **Spreadsheet updated**

Staff members have updated the spreadsheet that provides a detailed account of the results at each individual well where tests have been conducted and the state has confirmed that the well owners have received the results of those tests. The spreadsheet compares the individual results of testing for coal ash-related metals and constituents with state and federal water quality thresholds, if such a threshold exists. The spreadsheet includes specific results for an additional 20 wells since the April 30 spreadsheet was made public.

### Well test results summary updated

DENR also updated its summary of well test results on May 19. The summary of well test results includes information on 44 additional wells since the April 30 report. The summary includes information about wells that have been tested. The number of additional well owners is greater than the numbers added to the spreadsheet since April 30 because the summary includes information on tests where DENR has not yet confirmed that well owners have received results.

# Health risk evaluations summary updated

DENR has updated the report on the number of health risk evaluations that were produced by the N.C. Department of Health and Human Services and sent to homeowners along with the well test results. The updated summary includes information on 45 health risk evaluations that have been received by well owners since the first report April 30. Note: the summary of health risk evaluations was updated on May 15.

# **How to interpret the results (below)**

The bold number in brackets – for example (+1) - indicates the numbers added since the initial figures were made public April 30.

# Summary of wells tested (as of May 19, 2015)

### **Totals**

- 345 wells identified for possible testing
- 207 wells with results back to the state (+44)
- 191 wells exceeded a state 2L standard or an interim standard known, or IMAC (+39)

Allen Steam Station (Belmont, N.C.)

- 123 wells identified to date
- 86 wells with results back (+18)
- 83 exceeded a 2L standard or IMAC (+17)
- Exceedances for: (Antimony), (Thallium), (Zinc), (Cobalt), Iron, Vanadium, pH Asheville Plant (Asheville, N.C.):
- 11 wells identified to date
- 4 wells with results back

- 4 wells exceeded a 2L standard
- Exceedances for: pH, total suspended solids, Sulfate

Belews Creek Steam Station (Belews Creek, N.C.)

- 11 wells identified to date
- 8 wells with results back (+1)
- 5 wells exceeded a 2L standard or IMAC (+1)
- Exceedances for: Iron, Vanadium, pH

## Buck Steam Station (Salisbury, N.C.)

- 68 wells identified to date
- 38 wells with results back (+3)
- 37 wells exceeded a 2L standard or IMAC (+3)
- Exceedances for: (Antimony), (Cobalt), (Lead), (Manganese), (Zinc), (Sulfate), Iron,

# Vanadium, pH, (Total Dissolved Solids)

Cliffside Steam Station (Mooresboro, N.C.)

- 22 wells identified
- 15 wells with results back (+5)
- 10 exceeded a 2L standard or IMAC (+2)
- Exceedances for: Cobalt, Iron, Manganese, Vanadium, pH

## H.F. Lee Plant (Goldsboro, N.C.)

- 20 wells identified
- 8 wells with results back (+5)
- 7 exceeded a 2L standard (+4)
- Exceedances for: Cobalt, Manganese, pH

## Marshall Steam Station (Terell, N.C.)

- 46 wells identified
- 26 wells with results back (+6)
- 25 exceeded a 2L standard or IMAC (+6)
- Exceedances for: Cobalt, Iron, Lead, Manganese, Vanadium, pH

## Mayo Steam Station (Roxboro, N.C.)

- 5 wells identified to date
- 2 wells with results back (+1)
- 2 wells exceeded a 2L standard or IMAC (+1)
- Exceedances for: Iron, Lead, Vanadium, Manganese, pH

# Roxboro Steam Station (Semora, N.C.)

- 11 wells identified to date
- 7 wells with results back (+4)
- 6 wells exceeded a 2L standard or IMAC (+3)
- Exceedances for: Manganese, Vanadium, pH, Iron, Chloride, Total Dissolved Solids Sutton Plant (Wilmington, N.C.)
- 20 wells identified to date
- 11 wells with results back
- 10 exceeded a 2L standard or IMAC
- Exceedances for: Cobalt, Iron, Manganese, Vanadium, pH

## Weatherspoon Plant (Lumberton, N.C.)

- 8 wells identified to date
- 2 well with results back (+1)

- 2 well exceeded the 2L standard (+1)
- Exceedances for: pH

Summary of health risk evaluations produced by the N.C. Department of Health and Human Services (**As of May 15**<sup>th</sup>)

#### Totals

- Total wells with letters and health risk evaluations: 191 (+45)
- HREs with okay recommendation: 10 (+1)
- Wells with "Do Not Drink" HREs from DHHS: 166 (+43)
- DHHS resample recommendations: 96 (+4)

## Allen Steam Station (Belmont, N.C.)

- Total wells with letters and health risk evaluations: 86 (+27) (all are private wells)
- HREs with okay recommendation: 1 (+1)
- Wells with "Do Not Drink" HREs from DHHS: 83 (+26)
- 43 for vanadium only (+3)
- 27 for chromium 6 and vanadium (+20)
- 8 for iron and vanadium
- 2 for vanadium, chromium 6 and iron
- 1 for vanadium, chromium 6 and thallium
- 1 for chromium 6 and cobalt
- 1 alert for high sodium
- DHHS resample recommendations: 48 for chromium 6 and inorganics; 0 for lead and copper.

### Asheville Plant (Asheville, N.C.)

- Total wells with letters and HREs: 4 (private)
- HREs with okay recommendation: 2
- Wells with "Do Not Drink" HREs from DHHS: 0
- DHHS resample recommendations: 2 (both for chromium 6 and inorganics)

### Belews Creek Steam Station (Belews Creek, N.C.)

- Total wells with letters and HREs: 7 (+1) (private)
- HREs with okay recommendation: 2
- Wells with "Do Not Drink" HREs from DHHS: 4 (+1) (2 for vanadium only and 2 for iron only)
- DHHS resample recommendations: 3 for both chromium 6 and inorganics

### Buck Steam Station (Salisbury, N.C.)

- Total wells with letters/HREs: 35 private (+3); 3 public
- HREs with okay recommendation: 1
- Wells with "Do Not Drink" HREs from DHHS: 35 (+3)
- 12 for vanadium only
- 5 for vanadium and iron
- 12 for chromium 6 and vanadium (+3)
- 1 for vanadium and lead

- 1 for manganese, sodium and sulfate
- 1 for zinc
- 1 for iron
- 1 for chromium 6, vanadium and iron
- 1 for cobalt, vanadium and iron
- DHHS resample recommendations: 13 for chromium 6 and inorganics
- 1 for lead and copper

### Cliffside Steam Station (Mooresboro, N.C.)

- Total wells with letters/HREs: 11 (+1) (private)
- HREs with okay recommendation: 0
- Wells with "Do Not Drink" HREs from DHHS: 8 (+1)
- 1 for vanadium only
- 1 for vanadium and iron
- 3 for iron
- 2 for cobalt, iron and manganese
- 1 for chromium 6 (+**1**)
- DHHS resample recommendations: 8 for chromium 6 and inorganics

# H.F. Lee Plant (Goldsboro, N.C.)

- Total wells with letters/HREs: 5 (+2) (private)
- HREs with okay recommendation from DHHS: 0
- Wells with "Do Not Drink" HREs from DHHS: 5 (+2)
- 2 for cobalt (+1)
- 1 for chromium 6
- 2 for cobalt and manganese (+1)

## Marshall Steam Station (Terell, N.C.)

- Total wells with letters/HREs: 23 private (+4); 1 public
- HREs with Okay recommendation from DHHS: 0
- Wells with "Do Not Drink" HREs from DHHS: 21 (+4)
- 9 for vanadium only
- 3 for iron and vanadium
- 1 for lead and vanadium
- 4 for chromium 6 and vanadium (+3)
- 3 for iron, manganese and vanadium
- 1 for chromium 6 (+**1**)
- DHHS resample recommendations: 17 (16 for chromium 6 and inorganics; 1 for lead and copper)

## Mayo Steam Station (Roxboro, N.C.)

- Total wells with letters/HREs: 1
- HREs with Okay recommendation from DHHS: 0
- Wells with "Do Not Drink" HREs from DHHS: 1 (for lead, iron and vanadium)
- DHHS resample recommendations: 2 (1 for chromium 6 and inorganics; 1 for lead and copper).

(NOTE: A separate notation stated that high sodium could be an issue for people with sodium health issues).

### Roxboro Steam Station (Semora, N.C.)

- Total wells with letters/HREs: 4 (+1)
- HREs with Okay recommendation from DHHS: 0
- Wells with "Do Not Drink" HREs from DHHS: 4 (+1)
- 2 for vanadium
- 1 for chromium 6 manganese and vanadium
- 1 for vanadium, chromium6 and lead(+1)
- DHHS resample recommendations: 1 for chromium and inorganics; 1 for lead (+1)

(NOTE: A separate notation stated that high sodium could be an issue for people with sodium health issues).

# Sutton Plant (Wilmington, N.C.)

- Total wells with letters/HREs: 8 private (+6) and 2 public
- HREs with Okay recommendation from DHHS: 3
- Wells with "Do Not Drink" HREs from DHHS: 5 (+5)
- 2 for manganese and cobalt
- 1 for vanadium, manganese, cobalt, iron, sodium
- 1 for manganese, cobalt and sodium
- 1 for manganese, cobalt and iron
- DHHS resample recommendations: 1 chromium 6 and inorganics

# Weatherspoon Plant (Lumberton, N.C.)

- Total wells with letters/HREs: 1
- HREs with Okay recommendations from DHHS: 1
- Wells with "Do Not Drink" HREs from DHHS: 0

#### **Contacts**

For information on health risk evaluations, contact the DHHS media line at 919-855-4840. Contacts include Kendra Gerlach at <a href="mailto:Kendra.Gerlach@dhhs.nc.gov">Kendra.Gerlach@dhhs.nc.gov</a> or Alexandra Lefebvre@dhhs.nc.gov.

For information on well testing not related to health risk evaluations, contact the DENR Office of Public Affairs at 919-707-8624, 919-707-8602, 919-707-9033 or 919-707-9014. Contacts include Crystal Feldman, <a href="mailto:Crystal.Feldman@ncdenr.gov">Crystal.Feldman@ncdenr.gov</a>, Jamie Kritzer, <a href="mailto:Jamie.Kritzer@ncdenr.gov">Jamie.Kritzer@ncdenr.gov</a>, Sarah Young, <a href="mailto:Sarah.Young@ncdenr.gov">Sarah.Young@ncdenr.gov</a>, or Susan Massengale, <a href="mailto:Susan.Massengale@ncdenr.gov">Susan.Massengale@ncdenr.gov</a>.